ABSTRACT
        The United States Army battalion that suffered the
heaviest losses (189 soldiers killed) in the December, 1985 military
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recovery process, the integration of replacements, and the return of
the unit to a healthy readiness posture. Four psychosocial phases of
unit recovery were evident, each lasting about 4 to 6 weeks (numb
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integration/cohesion). A replacement plan that intermixed newcomers
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The findings suggest several interventions with potential to
facilitate the individual and group recovery process. (Author)

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PSYCHOLOGICAL ISSUES IN THE RECOVERY OF
AN ARMY UNIT AFTER TRAUMATIC LOSS *

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NOTICE: The views of the authors do not purport to reflect the position
of the Department of the Army or the Department of Defense
(para 4-3, AR 360-5).

2

PSYCHOLOGICAL ISSUES IN THE RECOVERY OF AN ARMY UNIT AFTER TRAUMATIC LOSS

ABSTRACT

The Army battalion that suffered the heaviest losses (189 soldiers killed) in the December, 1985 military charter airline crash was studied longitudinally over the 6-month period following the disaster. Extensive interview and observational data were collected at approximately monthly intervals. The purpose was to understand the various factors involved in the recovery process, the integration of replacements, and the return of the unit to a healthy readiness posture. Four psycho-social phases of unit recovery were evident, each lasting about 4-6 weeks: (1)Numb Dedication; (2)Angry Betrayal; (3)Stoic Determination; and (4)Integration/Cohesion. A replacement plan that intermixed newcomers with veterans facilitated integration and unit recovery. This was true even during the "Angry Betrayal" phase, when replacements were generally perceived as helpers in the effort to heal the unit. Although individual reactions varied somewhat, the generalized responses of the unit to this trauma can be considered as a military disaster "stress response syndrome" that characterizes the reactions of a cohesive group to a major technological disaster. Such a model aids understanding and permits us to anticipate the kinds of problems other units might confront after similar traumatic events. Several interventions with potential to speed the individual/group recovery process are suggested.

PSYCHOLOGICAL ISSUES IN THE RECOVERY OF AN ARMY UNIT
AFTER TRAUMATIC LOSS

In December 1985, a charter U.S. Army airliner crashed in Gander, Newfoundland, killing all on board. This was one of three flights carrying soldiers home for Christmas after 6 months of peacekeeping duty in the Sinai. Of the 248 soldiers killed, 189 (76%) were members of a single battalion of the 101st Airborne Division (Air Assault). One entire company of this battalion, 110 men, was destroyed. This event provided a rare, if tragic opportunity to study the effects of such devastating losses on an elite, cohesive front-line Army unit. The Army has almost no experience in rebuilding units after such losses, and has no established policies in this regard. As the military becomes increasingly dependent on air transportation for the movement of soldiers (and their families) around the world, the likelihood of such disasters also increases. The present research was undertaken to chronicle the rebuilding and recovery of this unit as a single case study. A better understanding of this process will permit military leaders and health care providers alike to take appropriate and effective steps to facilitate the speedy recovery of such affected units.

METHOD

Data were collected by means of unstructured individual and small-group interviews, and by participant observation of the unit in both garrison and field environments. The unit was studied longitudinally over a 6-month period. The first data-collection point was 5 weeks after the crash, and included retrospective reports covering the previous five weeks. This was followed by five interview and observation periods spaced at approximately monthly intervals. One observer participated in a variety of intensive training activities with the soldiers, including replacements and veterans, and later accompanied the unit on a major readiness exercise conducted in the Caribbean Sea. During the six-month period of study, approximately 600 hours of observations were recorded, and over 140 individuals were interviewed. Because of the suddeness of the event and the shortage of research resources, no control groups were examined. Also, permission for the research team to conduct the study hinged on our agreement to be as unobtrusive as possible. This precluded the use of structured interviews, surveys, checklists, or field psychiatric screening tools such as the DIS (Robins et. al., 1981). But since the lack of knowledge about such events requires that an exploratory approach be taken, we did not see this as a serious drawback. Our method might best be summarized as an in-depth clinical case-study of a social group in very unusual circumstances. Results and conclusions are thus tentative, but hopefully will suggest areas for future research attention.

2

RESULTS/DISCUSSION

Although individual reactions varied to some extent, there were some clear general trends that characterized the group as a whole. The focus here is on these general trends. Modal response tendencies can be grouped into four categories, each of which was most evident during a particular period after the crash. But these categories did overlap considerably, and sometimes dramatic individual differences were observed. The reader is thus cautioned to regard this scheme as tentative, and of unknown generalizability to groups other than the present one. Figure 1 presents a graphic illustration of this model.

[FIGURE 1 HERE]

Numb Dedication (weeks 1-6)

At one-month after the crash, the dominant mood can be described as "Numb Dedication". There was still a great deal of shock, confusion, and even disbelief among the survivors, but they had apparently reverted to well-developed work habits, complimented by a shared desire to repair the damage to the unit as quickly as possible. Grieving for lost friends was usually done in private; the public domain of garrison work was dominated by a numb and affectively detached but dedicated pursuit of "the mission". At this point in time, there were two facets to the mission. The first involved attending to the dead and caring for the families, and the second was re-assembling the unit.

SOCIO-HISTORICAL EVENTS

			INTEGRATION/ COHESION
		STOIC DETERMINA-TION	
	ANGRY BETRAYAL		
NUMB DEDICATION			

SUCCESSFUL CARIBBEAN EXERCISE; "WEEK OF THE EAGLES" WEEK 19 →

BURIAL OF THE LAST BODY WEEK 10 →

SHUTTLE EXPLOSION/ C.A.S.B. REPORT WEEK 6 →

WEEK 1 →

PERSON CHARACTERISTICS....
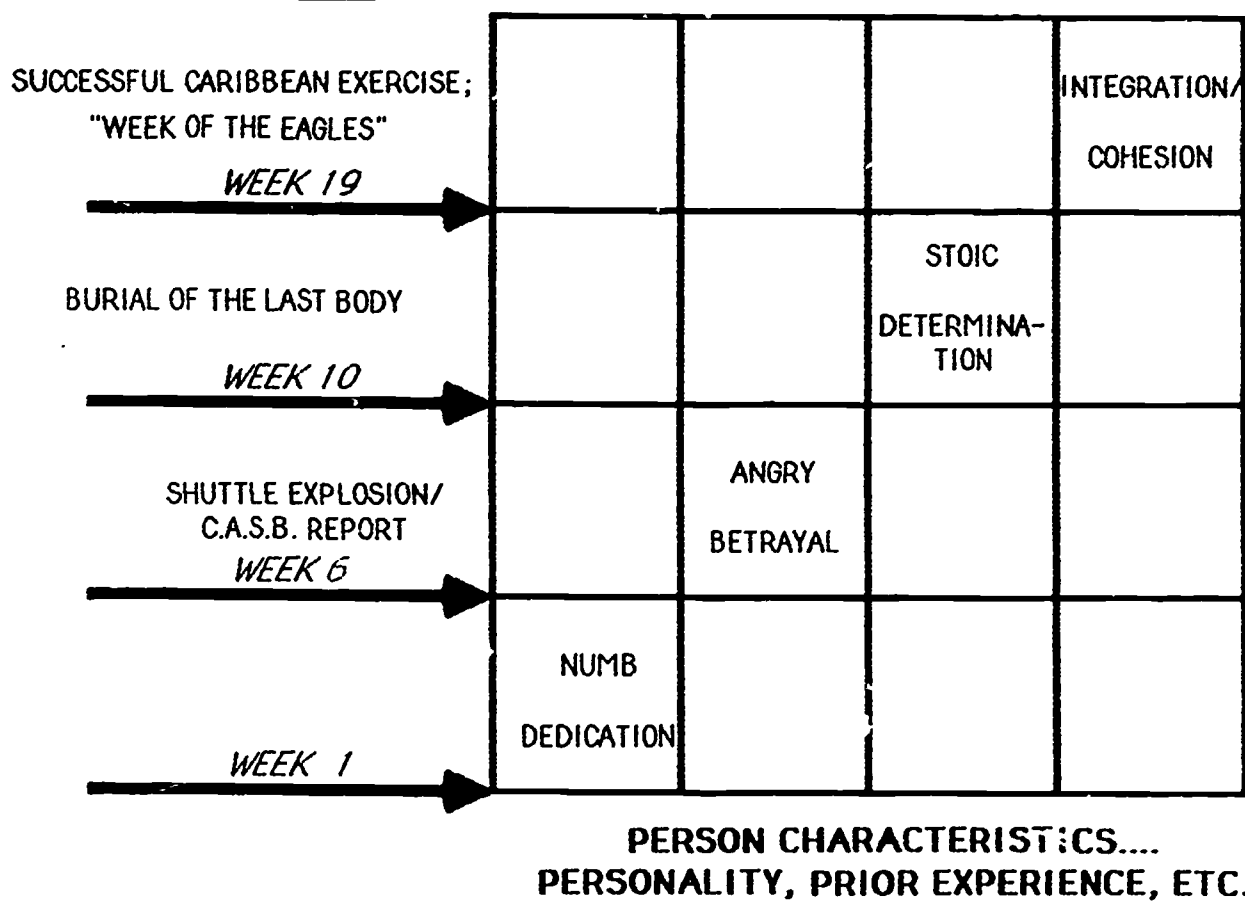PERSONALITY, PRIOR EXPERIENCE, ETC.

FIGURE 1: PSYCHO-SOCIAL PHASES OF GROUP RESPONSE TO DISASTER

Although assistance came from various on-post agencies (e.g., the Casualty Affairs Office), he affected unit had major responsibility for making sure that the dead received appropriate recognition and honors, that personal belongings were properly disposed of, and that family survivors were adequately cared for. The battalion headquarters became a locus of activity as family members, casualty workers, medical personnel and the media telephoned or came in person, seeking various data on the dead The entire battalion also played an active role in the planning and staging of two major memorial services, as well as provided numerous funeral honor-guard details and personal assistance officers to families.

At the same time that these necessary tasks were being attended to, the unit was also trying to piece itself back together. Certain key personnel had been lost in the c.ash (e.g., the battalion commander, the chaplain, and several major staff officers), and replacements had to be found for them. Also, over 160 new soldiers with various occupational specialties had to be located and reassigned. The challenge to the local personnel system was enormous. To further complicate matters, there were no policy guidelines for how to most effectively reconstitute the decimated company. After some debate, the battalion and brigade staff settled on a plan that sought to maximize contact of newcomers with veterans (see Appendix I). This was preferred over a plan that would have established a new company composed entirely of newcomers. It was hoped that this rebuilding strategy would (1)preserve and maintain the cultural integrity of the unit, (2)"spread-out" the inexperience across the battalion, and (3)speed the socialization and education of the newcomers. A major concern was that veterans might reject the

5

8

replacements, since many had lost close friends in the crash and were still grieving. Several researchers (e.g., Lipton and Schaffer, 1986) have in fact noted a tendency for combat veterans to avoid getting friendly with replacements, in an effort to protect themselves from future emotional distress associated with comrades being wounded or killed.

All of these tasks were pursued in a unit atmosphere that was somber but business-like, serious, efficient and detached. Very early on, there was general disbelief and even denial of the event. In fact, several representatives of the organization had initially claimed that the crashed plane "was not one of ours". This extreme organizational denial had to be abandoned as the facts emerged, but was followed by a generalized affective detachment, a form of denial at the individual and group level that was widespread. Soldiers working around the battalion area at this time described "a feeling of unreality, like this isn't really happening", "like I'm on automatic pilot", and feeling "like I'm here, but I'm not really here". Many described just feeling "numb" or "cold", having "no real feelings at all." This affectively constricted but task-oriented response set was reflected at the group level by leaders who enjoined their men to "behave like soldiers" and "focus on the mission". An official, 9-page letter describing command philosophy and goals for the next 6 months was released and distributed throughout the battalion in January of 1986. The letter made no mention of the crash or its repurcussions, despite the fact that funerals and ceremonies were still being held on a daily basis. This modus operandi of detached denial seemed to serve two important

6

9

functions. At the group level, it facilitated the reasonably effective pursuit of important unit tasks, such as allocating new personnel, responding to requests for information and funeral details, and mapping out a training schedule. Second, at the individual level it seemed to protect many soldiers from being overwhelmed by sadness and grief.

The interpretation that this detached style is a form of denial was further supported when various intrusive events triggered periods of uncontrolled crying and grief for many individuals. Photographs, personal belongings, automobiles, grieving family members, even a name-plate on a door or a scribbled note, all served as poignant reminders of the tragedy. Reports of disturbing dreams were commonplace, as was difficulty sleeping in general. Four surviving members of the unit reported recently "seeing" around post one or more of the soldiers killed in the crash. Other symptoms were frequent, such as loss of appetite and hyperalertness/jumpiness. Some soldiers reported being startled and frightened by sudden noises or movements that never bothered them before. Survivor guilt was also widespread. Many soldiers talked openly about feeling confused and fearful, and guilty about having survived while so many were killed. Throughout this period, there were numerous examples of individuals oscillating between avoidance on the one hand, and the sudden intrusion of the event into consciousness. Horowitz (1985) has suggested this is a characteristic feature of Post-Traumatic Stress Disorder.

Angry Betrayal (weeks 6-10)

Around the 6-week point, this initial reaction phase of Numb

7

Dedication shifted to one of "Angry Betrayal". The transition into this ne t phase seemed keyed to two m jor events. One was the release of a preliminary report of the Canadian Aviation Safety Board that suggested airline safety violations played a part in the crash. The other was the space shuttle Challenger explosion of January 28, 1986, in which all 7 aboard were killed. The CASB report confirmed the suspicions of many that negligence was a factor in the crash. And the shuttle explosion seemed, in the eyes of unit members, to completely and unfairly eclipse the Gander crash in terms of national media and public attention. Much anger was expressed toward the charter airline for alleged safety violations, as well as toward the upper-echelons of the Army for not assuring the safety of such charter flights. This anger was coupled with a sharp sense of betrayal for many soldiers, that the trust they placed in the Army to care for their safety had been violated. This angry phase was was also marked by an exaggerated sense of unit self-reliance, a "circle-the-wagons" mentality that drew the borderline at Battalion level. Anyone inside that line was regarded as a friend, and anyone outside it was viewed as a potential threat or enemy. Many soldiers seemed able to direct this anger into constructive channels, for example using it to energize their efforts to care for the dead and their families. It also seemed to enhance their desire to repair the unit quickly, by integrating the replacements and resuming full training activities as soon as possible. Some leaders were able to capitalize on this sentiment by stressing the need to "take care of our own" and "get the unit back on its feet again." While pathologists at Dover Air Force Base slowly identified the remains of all the dead, the unit continued to

8

11

provide soldiers for funeral honor-guard details. These funerals and
other memorial services were among many intrusive events that
continued to remind soldiers of the crash. Although there was a
clear lessening in expressions of sadness and crying during this
period, there was no noticeable decline in the number or severity of
symptoms like insomnia, frightening dreams, survivor guilt, and
jumpiness. Many soldiers reported using tranquilizers and alcohol to
relieve tension, and as soporifics.

Stoic Determination (weeks 10-20)

The identification and burial of the last dead soldier over 10
weeks after the crash constituted a signal event for the unit. An
almost palpable sense of relief accompanied the news of the last
positive body ID, and comments such as "at last we can put the crash
behind us" were common. Expressions of sadness and anger were
replaced by a sense of "Stoic Determination" to move ahead with the
mission and with life. Many soldiers described making a conscious
decision to focus their energies on the present and future, with the
aim of bringing the battalion back to a strong and healthy state.
The crash itself quite abruptly became a taboo topic. Emphasis was
on training. When it became necessary to refer to the event, such
as at repeated memorial services, various euphemistic terms were
used (e.g., "our Sinai heros"; "our soldiers who didn't make it
home"; "the plane that was lost").

Also during this period, a major training exercise provided
replacement troops the opportunity to prove themselves as loyal and
competent members of the unit, and most of them did. After this
exercise we observed an easy familiarity and sense of trust between

newcomers and veterans that wasn't apparent before. A variety of symptoms were still being reported, and some soldiers were aware of increased alcohol consumption. Memorial services scheduled during this period wer   eated with universal chagrin by the soldiers, who felt that enough had been done to honor the dead and it was now time to get on with life.

Although spoken references to the crash had virtually ceased, certain events suggested that the crash was by no means forgotten. For example, on boarding the plane for the Caribbean training exercise, at least four soldiers became violently ill. Two were observed vomitting beside the stairway to the plane (one of these soldiers attributed his sickness to some milk he had consumed earlier). Also, both on take-off and landing, all conversation among the passengers stopped, and an eery silence was maintained for 1-2 minutes. In individual interviews conducted afterwards, seven soldiers who had been on the plane all stated this was highly unusual behavior for U.S. soldiers on a deployment flight. All confirmed that they had been having thoughts about the Gander crash, and believed this was the case for everyone aboard. Clearly then, this plane trip represented a powerful, if not entirely conscious intrusive reminder of the crash for most of the soldiers in the unit.

Integration/Cohesion (weeks 20-30)

The return from the successful training exercise (about week 20) coincided roughly with a major Divisional historical celebration ("Week of the Eagles"). This seemed to mark a transition into a new phase for the unit, one of "Integration/Cohesion". This term is

10

meant to convey several meanings. On the one hand, it suggests that the replacements had been integrated into the unit and, to some extent, unit cohesion had been restored. This was a time of integration and cohesion also in the sense that both the unit and most of its members had been able to integrate the experience of the crash into their cognitive/emotional schemata.

Regarding the replacements, at this point they had already absorbed much of the skills and lore of the battalion, and were working comfortably alongside the veterans. Replacements had had the opportunity to prove themselves to their peers, and now described a sense of belonging and brotherhood with the unit. Three veteran squad leaders and one platoon sergeant reported that they no longer thought of the new soldiers as replacements, but as contributing members of the group.

It was a stage of integration in a personal sense also for many of the veteran members, who had now come to terms with the loss and seemed to have integrated it into their "weltenschauung" or world view. Many seemed to have capitalized on the experience, using it to enhance the sense of meaning or "cohesiveness" (cf. Antonovsky, 1979) in their lives. Some, on the other hand, described feeling physically and emotionally exhausted. Some soldiers believed that the crisis for the unit had been managed successfully, and they could now request transfers to other units. A few indicated a decision to resign from the Army altogether. A common complaint was that their dedication to the unit was in competition with dedication to families, and that there wasn't enough time for both. (This is reminiscent of Segal's (1986) characterization of the military and

11

the family as competing "greedy' institutions. Shils and Janowitz (1948) also reported on the power of the family, as a competing primary group, to interfere with the integrity and cohesiveness of military unit primary groups.)

Another important feature of this phase concerned the symbolic preservation of the crash victims in numerous memorial displays and plaques around the battalion. While such displays were usually ignored by the soldiers, their existence nevertheless seemed important to them. Possibly, the presence of such symbolic displays serves the paradoxical function of allowing survivors to turn their attention away from the disturbing event, without at the same time contributing to a sense of guilt. Survivors may pass by such displays without looking at them directly, and without consciously thinking about the crash, but aware at some level that here the memory of the victims and the event is honored and preserved. Survivors can thus forget, deny, "drive-on" without self-recrimination or guilt, secure in the knowledge that the event has penetrated the collective consciousness and memory of the unit. A number of authors (e.g., Lazarus, 1966) have argued that in some circumstances denial can be an effective defense in coping with stress. In this military unit, our observations suggest that some amount of denial was adaptive for many individuals, as long as the traumatic event and associated feelings had been openly addressed at some point. Beyond the Angry Betrayal phase, a turning away from the event, "not dwelling on it", was the modal, and probably the healthy response. We hypothesize that the presence of formal memorial displays facilitated this denial by making it relatively guilt-free. Some individuals, on the other hand, seemed to completely deny the

12

event and any associated feelings from very early on. One such survivor was, by his own report, drinking v ry heavily at the 6-month point. He claimed to hav₂ never discussed his feelings about the crash with anyone, and reported having avoided several of the memorial services held 3-5 months after the crash. It is possible that for such individuals the symbolic memorial displays would have a negative impact, serving as intrusive reminders of an event that had never been adequately addressed or "worked through".

This individual psychological process seems to have a parallel at the group level. During the first week of June, the Division celebrated its annual "Week of the Eagles". For one full week, a variety of ceremonies and special events commemorate the distinctive history of the 101st Division, its brigades and battalions. Although at that point the crash had been memorialized in the Division museum and in various displays around post, not a single reference was made to it in any of the formal celebrations held throughout the week. Perhaps this represents an institutional "turning away" or healthy denial similar to that commonly observed among individuals during this period.

Conclusions

Considering the unit as a whole, our data support the conclusion that the recovery from collective trauma was remarkably quick and thorough in this instance. The concern that replacements would not be accepted was seen to be unfounded. Paradoxically, the trauma itself apparently speeded the integration of replacements, since they were quickly perceived as allies in the effort to repair the damage to the unit. An innovative, locally-generated reconstitution

13

strategy had desirable consequences. This plan forced the structural integration of small groups of veterans with small groups of replacements, in contrast to forming a new group (company) composed entirely of replacements. This facilitated the sharing of experiences and information among old and new soldiers, and apparently speeded the recovery of unit social integrity and cohesion. The presence of leaders who adroitly balanced psychological sensitivity with a task-oriented concern for training also seemed to speed this process (cf. Bartone et. al., 1987).

A stage-like sequence of psychological responses to disaster is described, which characterizes both the affected battalion as a social unit, as well as individuals within this unit. Four phases summarize the dominant psychological response modes over the 6-months following the crash: (1) numb dedication; (2) angry betrayal; (3) stoic resolve; and (4) integration/cohesion. While the progression through these phases is at least partly a function of the passage of time, in this case each transition was linked to identifiable social-historical events. For example, the appearance of the angry-betrayal phase coincided with the Challenger space-shuttle explosion and the release of a report by Canadian aviation authorities on the probable causes of the Gander crash.

It is not known to what extent this model might apply to other disaster situations. The Gander crash was a technological or human-induced disaster, and we have examined its impact on the tight-knit, cohesive military community to which most of the victims belonged. But there is evidence that responses vary with the type of disaster, as well as with characteristics of the affected community (e.g.,

14

17

Frederick, 1980; Beigel and Berren, 1985). Perhaps less cohesive groups, and/or groups affected by natural disasters, would show none of the characteristics of the present response pattern. On the other hand, many disaster researchers have described responses very similar to those reported here. Psychic numbing and flattened affect as an early response has been observed in tornado victims (Wallace, 1956), survivors of the famous Coconut Grove nightclub fire (Lindemann, 1943), Hiroshima survivors (Lifton, 1968), and flood victims (Titchener, 1976; Erikson, 1976). But the dedication and diligence displayed by soldiers seen here during the "numb dedication" phase may be peculiar to highly organized, and tightly-bonded military groups. Other authors (Horowitz, 1976) have identified denial and intrusiveness as characteristic features of disaster responses, and these are elements that were observed in varying degrees in all four of our disaster recovery phases. Our "angry-betrayal" phase shares some features with Frederick's (1980) "disillusionment" phase, and our "integration-cohesion" period is also reminiscent of his "reorganization" phase. Also, we are not the first to observe a relation between major events in the post-disaster period and behavioral and psychological responses. Wallace (1956) described a three-stage disaster syndrome following a tornado, wherein an initial period of isolation was marked by dazed, stunned apathy. The following "rescue" period was dominated by dependent behaviors and feelings. And the "early rehabilitation" stage saw victims who were more active, altruistic, and sometimes euphoric. So here also it is not the mere passage of time that defines the passage into a different response phase, but the occurence of certain critical social events as well.

15

18

A question of great interest to military thinkers and planners concerns whether or not the unit recovery process afte similar large-scale losses can be speeded-up. Given the available data and lack of appropriate control groups, this remains an open question. But)ased on the observations reported here, some tentative suggestions are offered for how to best proceed under similar circumstances:

1. An initial difficult period of numb detachment, peppered with intrusive memories and events and associated grief episodes, can be expected. Many symptoms characteristic of PTSD can also be expected during this period. Mild tranquilizers prove helpful for some people as tension reducers and sleep inducers. Individuals who have the opportunity to "work through" the experience and their feelings by talking about it with friends, relatives, co-workers, and ealth care professionals seem to show fewer long term ill-effects than those not having such opportunities. In this regard, some kind of group de-briefings, perhaps conducted by squad leaders and medics, would probably be helpful.

2. A period dominated by anger is likely to follow. As long as it is directed toward some recognizable out-group, it may be possible for leaders to encourage the constructive channeling of such anger into activities that benefit the affected unit/in-group.

3. A rebuilding or reconstitution plan that forces close personal contact between veterans and newcomers seems to speed the acceptance and integration of the newcomers, especially if they are portrayed and perceived as allies in the rebuilding process.

4. A third phase of "stoic determination" is marked by the virtually complete absence of conversational references to the disaster. The start of this phase may coincide with the identification and burial of the last victim, an important symbolic "closing of the wound". Beyond this point, community leaders should refrain from staging continued memorial ceremonies. Such services represent unwelcome and probably unhealthy intrusive reminders for many individuals who are trying to establish some necessary and healthy psychological distance from the trauma.

5. A major successful shared group experience, such as a challenging and realistic field exercise, can spur growth and teamwork, and propel the unit into the "integration-cohesion" recovery phase. At this point also, the symbolic preservation of the disaster and its victims in some kind of permanent memorial display seems to serve important psychological functions for individuals and the group. It assuages survivor guilt for many, and facilitates the getting on with life.

16

Given our increasing dependence on air travel to move large numbers of troops, families, and civilians, disasters like the Gander crash must be expected to occur. These are important human pheromena which are difficult to study in a scientifically rigorous manner, and for which we are never quite prepared. Nevertheless, the potential for reducing human suffering compels us to make the attempt.

In this paper, we have summarized our efforts to faithfully record the responses of one Army unit after a major disaster, suggested a model for organizing these responses, and hopefully pointed to some important areas of attention for researchers and care-givers involved in future such events. A better understanding of the human disaster recovery process will lead to more effective intervention strategies for minimizing pain and suffering (including long-term psychological sequelae), and for maximizing speedy individual and community recovery. In military units, the rapid return to health and readiness after traumatic loss, whether in a peacetime disasters or in war, remains a matter of obvious national security concern.

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APPENDIX I: CROSS-LEVEL RECONSTITUTION STRATEGY FOR 3/502

FROM DIVISION/PIPELINE